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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/822,573   | 04/12/2004  | David Nelson         | 482.152             | 2640             |
| 27019  | 7590        | 12/02/2005           | EXAMINER            |                  |
| THE CLOROX COMPANY<br>P.O. BOX 24305<br>OAKLAND, CA 94623-1305 |             |                      | CINTINS, IVARS C    |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1724                |                  |

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/822,573

Applicant(s)

NELSON ET AL.

Examiner

Ivars C. Cintins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1724

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 and 23-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The term "having a multiply modal grain size distribution that has at least a first mode and a second mode" (claim 1, lines 2-3; and claim 23, lines 5-6) is vague, and indefinite as to the limitation intended. Claims 2-13 and 24-35 depend from either claim 1 or claim 23, and are therefore also indefinite.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-35 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Kuennen et al. (U.S. Patent No. 6,368,504). Kuennen et al. discloses a water treatment system comprising filtration media having particles with a variety of different grain sizes (see col. 2, lines 1-36); and further teaches that smaller filtration material particles provide improved filtration but lower flow rates, while larger filtration material particles provide improved flow rates but lesser filtration capability (col. 1, lines 23-34). Accordingly, this reference discloses the claimed invention with the exception of the relative volume percentage of each filtration material component. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a filtration material having the recited particle size distribution in the system of Kuennen et al., in order to obtain a corresponding balance between

Art Unit: 1724

filtration capability and flow rate in this reference system. Upon such modification, the reference material will inherently have the recited superficial contact time (claims 11, 20 and 32), the recited lead removal capability (claims 12, 21 and 33), the recited chloroform removal capability (claims 13, 21 and 34), and the recited particulate removal capability (claim 19).

Applicant's arguments filed June 15, 2005 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that Kuennen et al. fails to teach or suggest filtration media having the recited particles size distribution. It is pointed out, however, that this reference clearly teaches a filtration media having a multiplicity of different particles sizes (see col. 2, lines 1-36), and further teaches that smaller particles provide improved filtration but lower flow rates, while larger particles provide improved flow rates but lesser filtration capability (see col. 1, lines 23-34). Accordingly, one of ordinary skill in the filtration art would have been motivated to select particles having the recited size distribution for the filter of Kuennen et al., in order to obtain a corresponding balance between filtration capability and flow rate.

Applicant also argues that Kuennen et al. does not teach or suggest using grain size distributions "having more than one mode," and that it would not have been obvious to one of ordinary skill in the art to employ filtration material having a particle size distribution "with more than one mode." Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability since it is not clear what Applicant intends by the term "more than one mode." In any event, the reference filter is inherently capable of being employed to treat water at different flow rates (modes?), and this capability is all that appears to be required by this term.

Art Unit: 1724


**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
September 18, 2005